

Country : POLAND
CATEGORY : General Biology. B
 : General Histology.
ABR. JOUR. : RZBiol., No. 3 1959, No. 9635
AUTHOR : Ber, Artur; Grott, Ewa.
INST. : -
TITLE : Studying the Melanophore Reaction. 2nd Report.
 Locally Limited Color Changes in Frogs.
ORIG. PUB. : Endokrynol. polska, 1956, 7, 195-203
ABSTRACT : Locally applied pressure on the skin of frogs
 produces color changes which are caused by
 dilatation and contraction of melanophores.
 See also: RZh Biol. 1958, 96597.

CARD: 1/1

BER, A.

EXCERPTA MEDICA Sec.3 Vol.11/8 Endocrinology Aug 57

1481. BER A. Złk. Endokrynol. AM, Łódź. *Endokrynologia w sztuce. Doniesienie 2. Bozek staroegipski Bes. Doniesienie 3. Maszkarony zamku w Pieskowej Skale. Endocrinology in art. 2. The god Bes of ancient Egypt. 3. Sculptured monsters at the castle in Pieskowa Skala ENDOKR. POL. 1956, (270-275 and 276-279) Illus. 8
- II. After examining approx. 100 statuettes of the god Bes from various museums and from different epochs, it is concluded that the original of that god was a hypothyroid dwarf. In the course of time the statuettes, which were manufactured 'en masse', deviated more and more from the original, though preserving some of its characteristic traits. It is supposed that Bes was created not in Africa but on the coasts of Asia, most probably in the Hectic State in Asia Minor.
- III. Some sculptured monsters discovered at the castle in Pieskowa Skala show characteristic features of hypothyroidism. They are probably to be interpreted as the proof of a widely spread endemic goitre and hypothyroidism in the mountain region of Cracow in the 16th century.
- Ber - Łódź (III, 1, 5, 6*)

BeB, A

POLAND/Human and Animal Physiology - Digestion.

V-7

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4077

Author : A. Ben, H. Mikolajczyk

Inst : -

Title : Studies on the Hyaluronidase-Hyaluronic Acid System.
Effect of Hyaluronic Acid on the Healing of Experimental
Gastric Ulcers in Rats.

Orig Pub : Patol. polska, 1957, 8, No 1, 31-36

Abstract : Hyaluronic acid speeded in rats the healing of gastric
ulcers, produced by Sel'ye's method, by stimulating the
development of granulation tissue and connective tissue.
Hyaluronidase did not have any effect.
Experimental ulcers in rats may be observed roentgenolo-
gically.

Card 1/1

Bar

POLAND / Physical Chemistry. Electrochemistry.

B

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 53109.

Author : Kemulya, Bar, Doylido.

Inst : Not given.

Title : A Polarographic Study of the Anode Oxidation of
a Lead Amalgam in Alkaline Solutions.

Orig Pub: Roczn. chem., 1957, 31, No 1, 205-212.

Abstract: The anodic waves of a Pb amalgam were studied in buffer solutions having a pH from 8-13. In solutions having pH=9 the anodic wave is splitting and the maximum current equals that observed in neutral solutions and is reached at $E = 0.2v$ (sat.c.e.). The composition and concentration of a buffer solution effects the nature of polarographic waves. The effect of a current suppression as a result of an adsorption process can be noted (a disap-

Card 1/2

POLAND / Physical Chemistry. Electrochemistry.

B

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 53109.

Abstract: pearance of oscillating, formation of a current minimum). In alkaline solutions containing a complexing agent (tartrate) at $E = -0.5v$ one wave is produced with a height corresponding to the diffusion current. The observed abnormalities are explained by the formation of a $Pb(OH)_2$ (precipitate or basic salt) which is being adsorbed on the electrode surface (R.Zh.Khimiya, 1958, 17222). An electrolytical method for Pb amalgam preparation is described.

Card 2/2

BER, Artur; ZIELNIŃSKI, Jerzy

Effect of prolonged starvation on limb regeneration in the frog.
Xenopus laevis. Pat.Polska 9 no.1:35-38 Jan-Mar '58.

1. Z Zakładu Endokrynologii A.M. w Łodzi Kierownik: prof. dr A. Ber
Adres autora: Łódź, ul. 22 Lipca 29/7.

(STARVATION, eff.

on limb regen. in frog (Pol))

(REGENERATION,

eff. of starvation on limb regen. in frog (Pol))

EXCERPTA MEDICA Sec 3 Vol 14/2 Endocrinology Feb 60

424. INFLUENCE OF NERVOUS AND PSYCHICAL FACTORS ON OVULATION
SPERMIOGENESIS AND COPULATION IN THE FROG XENOPUS LAEVIS
(DAUDIN) - Wpływ czynników nerwowych i psychicznych na jajczkowanie,
spermioogenezę i kopulację u żab xenopus laevis daudin - Per A. and
Zieleniewski J. Zakład Endokrynol. A.M. w Łodzi - ENDOKR. POL.
1950, 10/2 (83-90) Graphs 1

BER, Artur; DRYZEK-MIKOLAJCZYK, Laurencja; MIKOLAJCZYK, Henryk

Studies on hyaluronidase-hyaluronic acid system. 5. Mechanism of growth in a concentrated form of certain staphylococcal strains in a bouillon with added hyaluronic acid. Med. dosw. mikrob. 11 no.3:233-292 1959.

1. Z Zakładu Endokrynologii A. M. w Łodzi B. kierownik: prof. dr A. Ber.

(STAPHYLOCOCCUS, culture) (HYALURONIC ACID, pharmacol.)

BER, Artur; DRYZEK-MIKOLAJCZYK, Laurencja; MIKOLAJCZYK, Henryk

Studies on hyaluronidase-hyaluronic acid system. 6. Mucopolysaccharide nature of substances produced by certain strains of Staphylococcus albus. Med. dosw. mikrob. 11 no.3:293-303 1959.

1. Z Zakladu Endokrynologii A. M. w Lodzi B. kierownik: prof. dr A. Ber.
(STAPHYLOCOCCUS, metab.) (MUCOPOLYSACCHARIDES, metab.)
(HYALURONIC ACID, pharmacol.)

BER, Artur; MIKOLAJCZYK, Henryk

A new method for the production of experimental ulcers of the stomach in rats. Report 1. Local injections of histamine. Pat. Polska 11 no.2:145-157 '60.

1. Z Zakladu Endokrynologii A.M. w Lodzi b Kierownik: Prof. dr Artur Ber.

(PEPTIC ULCER exper)
(HISTAMINE pharmacol)

BER, Artur; MIKOLAJCZYK, Henryk

A new method for the production of ulcers of the stomach in rats.
Report 2. Local injections of pepsin. Pat.polska 11 no.2:159-163
'60.

1. Z Zakładu Endokrynologii A.M. w Łodzi b. Kierownik: Prof. dr
Artur Ber.

(PEPTIC ULCER exper)

(PEPSINS exper)

BER, Artur; MINOLAJCZEK, Henryk

A new method for the production of experimental ulcers of the stomach in rats. Report 3. Local injections of sodium chloride. Pat.polska 11 no.2:165-169 '60.

1. Z Zakładu Endokrynologii A.M. w Łodzi b. Kierownik: Prof. dr Artur Ber.

(PEPTIC ULCER exper)

(SODIUM CHLORIDE pharmacol)

BER, Andrzej

Quaternary of the Chodelsk Hollow. Kwartalnik geol 6 no.4:
747-748 '62.

1. Zaklad Zdjec Geologicznych, Instytut Geologiczny, Warszawa.

YANSHIN, A.L.; PETRUSHEVSKIY, B.A.; ALEKSANDROVA, M.I.; BORSUK, B.I.;
VOLIN, A.V.; ZUBKOVSKAYA, I.M.; YAKOVLEV, D.I.; BIR, A.G.;
BOBOVIKOV, L.I.; BOYTSOVA, Ye.P.; OVECEKIN, M.K.; BESPALOV, V.F.;
SHLYGIN, Ye.D.; SPYRANSKIY, B.F.; KHAKELOV, V.A.; RAGOZIN, L.A.;
DITMAR, V.G.; GORSKIY, I.I., red.; KASSIN, M.G., red.; FOMICHEV,
V.D., red.; DEMYANOVSKIY, Yu.K., red.; CHIKHACHEV, P.K., red.;
KOMISHAN, I.S., red.; DASHKOVA, A.D., red.; VODOLAGINA, S., tekhn.
red.; VLOVINA, M.P., tekhn. red.

[Geological map of the U.S.S.R., scale 1:1,000,000] Geologicheskaya
karta SSSR, masshtab 1:1,000,000. [Explanatory notes to accompany
sheet] Ob"yasnitel'naya napiska k listu. _____ L-40 [Uba] (Uba).
1949. 56 p. _____ L-41 [Kryl-Orda] (Kryl-Orda). 1946. 20 p.
_____ L-42 [Karsakpai] (Karsakpai). 1949. 42 p. _____ M-41
[Turgay] (Turgai). 1948. 28 p. _____ M-43 [Karaganda] (Karaganda).
1947. 37 p. _____ M-42 [Petrovsk] (Petrovsk) 1947. 27 p.
_____ M-44 [Novosibirsk] (Novosibirsk) 1948. 33 p. _____ O-45
[Tomsk] (Tomsk). 1949. 26 p. _____ O-49 [Kirensk] (Kirensk). 1947.
40 p. Moskva, Gos. izd-vo geol. lit-ry. (MIRA 11:8)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii.
(Geology--Maps)

BER, A.G.

19809 BER, A. G.

Ob otkrytii effuzivnykh porod v mezoxoe tsentral'noy chasti turgayskoy vpadiny, Doklady

Akad. Nauk SS R, Novaya Seriya, T. LXVII, Nol, 1949, S. 121-23

SO: LETOPIS ZHURNAL STATY -Vo., 27, Moskva, 1949

BER, A.G.

USSR/Geology - Petrography

Card 1/1 : Pub. 22 - 35/49

Authors : Ber, A. G.

Title : About the paleogenic erosion crust in the Turgansk depression

Periodical : Dok. AN SSSR 98/4, 637-639, Oct. 1, 1954

Abstract : Geological data on the growth of the paleogenic erosion crust in the Turgansk depression are presented. Map, showing the geomorphological elements and the extension of the Oligocene erosion crust in the northern part of the depression, is included. One USSR reference (1954).

Institution : ...

Presented by : Academician D. V. Nalivkin, June 26, 1954

HER, A.G.

New data on Cretaceous sediments in the northern part of the
Turgay Gates. Sov. geol. no.62:3-23 '57. (MIRA 11:6)

1.Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.
(Turgay gates--Geology, Stratigraphic)

BMR, A.G.

Mesozoic effusive sedimentary formation in the northern part of the
Turgay Gates [with summary in English]. Sov. geol. 1 no.3:22-37
Mr '58. (MIRA 11:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.
(Turgay Gates--Geology, Stratigraphic)
(Rocks, Sedimentary)

BER, A.

The age of the foldings near Dobrzyn. Eul geolog PAN 8 no.1:49-52
'60.

1. Department of Quaternary Geology, University, Warsaw. Presented
by S. Z. Rozycki.

(Folds(Geology))

BER, A.G.

Isolation of the Antopol' series of the Miocene in White Russia.
Inform.sbor. VSEGEI no.43:83-95 '61. (MIRA 14:12)
(White Russia--Geology, Stratigraphic)

KAPLAN, L.M.; SHAPIRO, L.L.; BER, A.S., inzh., nauchn. red.

[Operation and production planning in construction and
assembling organizations] Operativno-proizvodstvennoe
planirovanie v stroitel'no-montazhnykh organizatsiakh.
Leningrad, Stroiizdat, 1964. 170 p. (NIRA 17:6)

BER, A. E.

USSR/Engineering—Building work

Card 1/1

Authors : Ber, A. E., and Verpgo, G. S., Engineers

Title : Elevators with taut cables in place of guide rails used in building the Moscow University

Periodical : Mekh. Stroi. 11/2, 29-31, February 1954

Abstract : The use of tightly stretched cables as guide rails for elevators used in construction work was found to be economical. The elevator lifts a ton with the speed of 1 m/sec and is found to have a number of additional advantages. Half-tone cut and drawings.

Institution :

Submitted :

BER, A.E.

USSR/Engineering - Structure

Card 1/1 : Pub. 70 - 10/11

Authors : Ber, A. E., and Shvedov, P. N.

Title : ~~Assembly of emblems and other decorative fixtures on the tall Moscow University building~~
Assembly of emblems and other decorative fixtures on the tall Moscow University building

Periodical : Mekh. stroi. 4, 29-31, Apr 1954

Abstract : The methods and devices used in lifting and assembly of dome sections and emblems on the 52-meter tall tower of the newly erected Moscow University building, are described. Illustrations; drawings.

Institution :

Submitted :

100, 100.

Photography of the ...
of the ...
17, 1960 ... (MIA ...)

BER, B.

LAPINSKIY, I., inzhener; BER, B., inzhener.

Refrigeration equipment in the State Department Store. Khol.
tekh. 31 no. 2:52-56 Ap-Je '54. (Mika ? : / ,
(Refrigeration and refrigerating machinery)

BER, B.A.; KLIMOV, A.G.; LYUDSKOV, B.P. redaktor; ROSLOV, G.I., tekhnicheskiiy redaktor.

[Installation, repair and operation of refrigeration equipment] Montazh, remont i eksploatatsiia kholodil'nogo oborudovaniia, Moskva, Gos. izd-vo torgovoi lit-ry, 1955. 280 p. (MLA 8:8)
(Refrigeration and refrigerating machinery)

BER, BORIS ARKAD'YEVICH

BER, Boris Arkad'yevich; KLIMOV, Aleksey Georgiyevich; SINEL'NIKOVA, Ts.B.,
red.; MEDVISH, D.M., tekhn.red.

[From refrigerating machinery] Freonovye kholodil'nye ustanovki.
Moskva, Gos.izd-vo torg.lit-ry, 1957. 183 p. (MIRA 10:12)
(Refrigeration and refrigerating machinery)

AS 11:15.A.
BMR, B., inzh.

Installing freon refrigerating units in commercial concerns. Khol.
tekh. 34 no.4:66-67 O-D '57. (MIRA 11:1)
(Refrigeration and refrigerating machinery)

BER, B., inzh.; KUZNETSOVA, A., inzh.

Standards for refrigeration equipment of food stores. Khol.tekh. 35
no.5:49-51 S-O '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy
promyshlennosti.
(Food--Preservation) (Refrigeration and refrigerating machinery)

BFR, B., inzh.

Response to the A.Solodovnik's article. Khol.tekh. 3"
no.1:59-61 Ja-F '60. (MIRA 13:5)
(Refrigeration and refrigerating machinery)
(Solodovnik, A.)

BER, Boris Arkad'yevich; KUZNETSOVA, Anastasiya Aleksandrovna; GOGOLIN, A.A.,
Kand. tekhn. nauk, nauchnyy red.; KAPLUN, M.S., red.; BRODSKIY, M.P.,
tekhn. red.

[New types of commercial refrigerating equipment] Novye vidy торго-
vogo kholodil'nogo oborudovaniia; nauchnoe soobshchenie. Moskva,
Gos. izd-vo torg. lit-ry, 1961. 44 p. (MIRA 14:10)
(Refrigeration and refrigerating machinery)

BER, B.A., inzh.

New types of commercial refrigeration equipment. Khol. tskh. 3^o no. 4:
73.76 J1-Ag '62. (MIRA 17:2)

BER, B.A., inzh.

New type of refrigerating equipment for commercial enterprises.
Khol. tekhn. 39 no.5:66-68 S-O '62. (MIRA 16:7)

(Refrigeration and refrigerating machinery)

BER, A. Ya.

BER, A. Ya. "The significance of Knapp's adrenal test for the diagnosis of glaucoma", Oftalmol. zhurnal, 1948, No. 4, p. 176-79.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

CA

29

Checking the volumetric method of Lee for the determination of tannin. 1. Ber. Koshrenno-obsnaya P'om U. S. S. R. 1912, 277-R; Chem. Zvest. 1913, 11, 2001. After checking the method of Lee for the detn. of nontannin, it was found that only 1.5 g. of powder, 10% and 25 cc. of the tanning soln. were sufficient for the test. This is almost 25% of the amt. required by the official method. The method is superior to that of Lowenthal both in speed and in accuracy of detn. of end point. M. G. Moore

EXCERPTA MEDICA Sec 5 Vol. 10/10 Pathology Oct 57

3083. BER I. and BER A. Zakl. Endokrynol. A.M., Łódź. * Zęby w endokrynach.
The teeth in endocrine disease ENDOKR. POL. 1956, 7 (51-72)
Illus. 29

Discussion of the aberrations found in a number of cases. In pituitary dwarfism a poor development and wide separation may be found, as opposed to the more common teeth-crowding, probably due to early inhibition of skeletal development and dentition. In one case of gigantism crowding of the teeth was observed. In hypothyroidism and mongolism delayed and underdeveloped teeth with a tendency to caries were observed. (III, 5, 6)

BER, I.

Simple method of counting driver wages. Avt. transp. 37 no.9:28
S '59. (MIRA 12:12)
(Transportation, Automotive--Accounting)

BER, I.

Our suggestion. Avt. transp. 42 no.7:39 JM '64.

(MIRA 17:11)

1. Zamestitel' nachal'nika avtoupavleniya Komi ASSR.

KOL'NER, Semen Vladimirovich; KISELEVA, N.P., inzh., ved. red.; BER,
I.Ya., inzh. red.; SOROKINA, T.M., tekhn. red.

[Deburring gear wheels]Zachistka zausentsev zubchatykh koles.
Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958.
19 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt.
Tema 10. No.M-58-84/15) (MIRA 16:3)
(Gear cutting)

BER, I.Ya., inzh.; SHELKOV, N.I., inzh., ved. red.; TOLMACHEV, V.B.,
inzh., red.; SOROKINA, T.M., tekhn. red.

[Work on turning, turret and automatic metal-cutting machines;
abstracts] Tokarnye, revol'vernye i avtomatnye raboty; referativ-
nyi sbornik. Moskva, Filial Vses.in-ta nauchn. i tekhn. in-
formatsii, 1958. 26 p. (Pereodoi nauchno-tekhnicheskii i pro-
izvodstvennyi opyt. Tema 10. No.M-58-364/49) (MIRA 16:3)
(Metal cutting--Abstracts)

BER, K.M.

[History of animal embryology; observations and reflexions]
Istoriia razvitiia zhivotnykh; nabludeniia i razmyshleniia. Moskva.
Izd-vo Akademii nauk SSSR, 1953. 625 p. Vol. 2. (MLRA 7:2)
(Birds--Embryology) (Embryology)

SR, L.

5607 Ser, 1, Individual'nyy friktsionnyy lm-2 (arbel' silovnykh letal').
M., MTInf, 1951. 3 s.s chert. 22 sm. (Sovet Prorysl. Kooperatsii RSRSS.
Rospromsovet . Tekhn. ugr. oboznen opytom v promysl. kooperatsii. Inform. Listok).
20,0 s chm. kopol.-art. ulasan v v . dan.--(55-1563) 67.1.05-73 621.51

SO: 'Khizhnaya Letopis', Vo. 1, 1951

SEN, L.B.; VAYNBLAT, Yu.K.

Method of quantitative absorption X-ray microanalysis. Zav. lab.
31 no.10:1210-1211 '65. (CIRA 19:1)

BER, L. E.

AUTHOR: Ber, L. E. (Perm')

24-11-10/31

TITLE: On the theory of thermo-gravitational convection under conditions of turbulence. (K teorii termogravitatsionnoy konveksii v usloviyakh turbulentnogo rezhima).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.11, pp. 75-83 (USSR)

ABSTRACT: Approximate equations are derived which express the super-position of the turbulent forced and the free heat convection, Eqs.(3.14) and (3.15), p.80. The "turbulent viscosity" and the "turbulent heat conductivity", which figure in the equations, were studied for a flow in a circular cylindrical tube by evaluating the published experimental results of a number of authors (Refs.1-3). An approximate solution is given of the super-position of turbulent forced and free heat convection in a circular vertical tube and the obtained results are compared with experimental data published by Watzinger and Johnson (Ref.2). Acknowledgments are made to I. G. Shaposhnikov and G. A. Ostroumov for their criticism of the problems dealt with in the paper.

Card 1/1

There are 5 figures, 1 table and 4 references, 1 of which is Slavic.

SUBMITTED: July 15, 1956.

AVAILABLE: Library of Congress.

HER, L.E.

Method for solving problems on nonisothermic turbulent convection
in a canal between two parallel planes. Zhur.tekh.fiz. 29 no.1:
61-69 Ja '59. (KIRA 12:4)

1. Sel'skokhozyaystvennyy institut im. akad. D.N. Pryanishnikova,
Perm'.

(Heat--Transmission)

S/179/62/000/006/005/022
E114/E414

AUTHOR: Ber, L.E. (Perm')
TITLE:

Solution of the problem of the superposition of
turbulent forced and free thermal convection in a
vertical tube when internal sources of heat are
present in the fluid

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye
tekhnicheskikh nauk. Mekhanika i mashinostroyeniye,
no.6, 1962, 25-32

TEXT: The differential equations expressing the laws of
conservation of momentum and energy for the steady turbulent flow
of a fluid in a vertical tube of circular section with uniformly
distributed sources of heat are written down. It is assumed that
the flow is stabilized hydrodynamically and thermally, i.e. the
mean values of the pulsating quantities are time independent,
the flow is axially symmetric, the radial component of the mean
velocity is zero, the physical properties of the fluid are
constant, apart from the density which is a function of
temperature, and the temperature of the wall of the tube varies
Card 1/3

S/179/62/000/005/005/022
E114/E414

Solution of the problem of ...

linearly. The differential equations are transformed by introducing dimensionless variables. For the solution of these equations the three-layer model of a turbulent stream due to Karman is used: a laminar layer along the wall, an intermediate layer and a turbulent stream core. In the solution for the turbulent core the molecular viscosity and thermal conductivity are neglected and only the turbulent viscosity and turbulent thermal conductivity retained; the opposite approximation is employed in the laminar layer along the wall. In the intermediate layer both sets of coefficients have to be taken into account. An empirical formula (R.C.Martinelli, Trans. ASME, no.8, 1947, 69) for the velocity is used to determine the turbulent viscosity in the intermediate layer and the turbulent thermal conductivity is deduced from this. The radial variation of temperature in the intermediate layer is obtained and hence the temperature and velocity at the boundary between the intermediate layer and the turbulent core. Expressions are given for the zero and first order approximations to the velocity and temperature in the turbulent core. Velocity and temperature

Card 2/3

Solution of the problem of ...

S/179/62/00C/006/005/022
E114/E414

profiles are given for various values of the relative density of the internal heat sources. Various particular cases of the direction of the forced motion of the fluid and of the axial temperature gradient are considered. The heat exchange between the walls of the tube and the fluid in the case when the internal sources of heat are absent is calculated and curves are given of the relation between the Nusselt and Reynolds numbers. The effect of free convection on the heat exchange is also calculated. There are 3 figures.

SUBMITTED: May 12, 1962

Card 3/3

BER, L.E. (Perm')

Solution of equations of mixed turbulent convection in a vertical
pipe. Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i mashinostr. no. 3:163-164
My-Je '63. (MIRA 16:8)

(Pipe--Hydrodynamics)

F.R, I.V SIMONOVICH.

Ryby Presnykh vod SSR i Sopredel'nykh Stran. (Fish of
Fresh Waters of the USSR and Adjoining Countries) Chast 1
Izd. 4. isprav. i dopol. Moskva, Izd-vo Akademii Nauk SSSR,
1948- v. At Head of Title: Akademiya Nauk SSSR.
Zoologicheskii Institut. Lib. Has:

So: N/5
728
.B4

BER, Nadezhda S.

BER, Nad-zhda S. Izdaniia Irkutskogo Gosudarstvennogo universiteta za desiat' let ego sushchestvovaniia, 1918-1928; bibliograficheskii ukazatel'. Irkutsk, Izd. Irkutskogo univ., 1930. (Trudy biblioteki Irkutskogo universiteta. No. 2.).

DLC: Z5055.R913

So: LC, Soviet Geography, Part II, 1951/Unclassified.

BER, P.M.

Pay more attention to the problems of lowering the costs of
starch products. Sakh.prom. 35[i.e. 36] no.2:52-55 F '62.
(MIRA 15:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakmalopra-
tochnoy promyshlennosti.
(Starch industry—Costs)

BER, P.M.

Improve the establishment of norms for the expenditure of raw materials in the manufacture of raw potato starch. Sakh. press. 37 no.5:55-59 My '63. (MIRA 16:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhmalo-patochnoy promyshlennosti.
(Starch industry--Production standards)

BER, P.M.

Make wider use of the experiences of progressive enterprises.
Sakh.prom. 38 no.3:49-51 Mr '64. (MIFA 17:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhmalo-
patochnoy promyshlennosti.

KUCHINSKIY, M.; DORFMAN, F., *tekhnolog*; SEREBRYANNIKOVA, Kh., *kand.khimiicheskikh nauk*; BER, V., *inzh.*; SHCHEBANOV, P.; POLYAKOV, V., *ratsionalizator* (Sverdlovsk)

New developments in factories. *Most.prom.i khud.promys.* 1 no.2/3:
36 N-D '60. (MIFA 14:4)

1. Direktor fabriki "Kommunar", Orsha (for Kuchinskiy). 2. Fabrika "Rezinoprom" (for Dorfman). 3. Direktor fabriki "Shchetotchnik, Rostov (for Shchebanov).
(Manufacture—Technological innovations)

BER, V.G.

Protection of botanical collections from pests. Bot.zhur.
44 no.9:1261-1270 S '59. (MIRA 13:2)

1. Botanicheskiy institut im.V.L.Komarova AN SSSR, Leningrad.
(Plants--Collection and preservation)

BER, V.G.

Protection of botanical collections from injurious insects. Analele
biol 14 no.2:164-178 Ap-Je '60. (EEAI 9:11)
(INSECTS): (HERBARIA)

BER, V. G.

Protection of botanical collections from pests. Bot. zhur. 48
no.3:384-395 Mr '63. (MIRA 16:4)

1. Botanicheskiy institut imeni V. L. Komarova AN SSSR,
Leningrad.

(Plants--Collection and preservation)
(Insecticides) (Insect baits and repellents)

SEREBRENNIKOVA, A.G.; BER, V.L.

Gluing, dyeing, and painting of articles made of polystyrene.

Plast.massy no.2:46-48 '62.

(MIRA 15:2)

(Styrene polymers)

BELOUS, M.Ye., inzh.; BER, Ya.I., inzh.; VINOKUROV, I.S., inzh.

Manufacture and installation of corrugated bulkheads in whalers.
Sudostreennik 25 no.4:36-40 Ap '59. (MIRA 12:6)
(Whalers)

S/137/61/000/011/016/123.
A060/A101

AUTHORS: Ber, Yu.M., Gunne, Kh.E., Chashinev, A.V., Yanushkovskiy, V.A.

TITLE: Automation of separate aggregates in dressing and agglomeration plants by means of radiometric instruments

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 20, abstract 11V140 (V sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR, v. 3", Moscow, Gostoptekhzdat, 1961, 159 - 161)

TEXT: Results of the testing of radiometric instruments for the automation of bunker loading are cited. Two Co⁶⁰ radiation sources are placed upon the inner wall of the bunker. The first one, controlling the upper level, may irradiate two sensors, one of which transmits a signal as to the state of the bunker to the dispatcher, and the second controls the position of the automatic rack. If the bunker is filled up to the upper level, then the source affixed to the bogie cannot irradiate the sensor, as result of which the bogie will not remain above the bunker. Now if the bunker is not filled up, then the irradiation of the cassette will lead to the stopping of the bogie. УПАП-2а (UFAP-2a) from the Tallin KIP factory was used as the radiometric device. The radiation source was

Card 1/2

Automation of separate aggregates ...

S/137/61/000/011/016/123

A060/A101

of comparatively low activity (4.5 mg-equiv. of Ra for each level). The sensitivity and response time of the scheme turned out to be entirely satisfactory for the automatic rack velocity of 0.3 m/sec. At the level of the operating platform near the bunker the radiation dosage was 0.025 μ R/sec, whereas at the level of the scale cars, under the bunker, there was practically no radiation.

A. Pokhvisnev

[Abstracter's note: Complete translation]

Card 2/2

ZYTNER, David Yakovlevich; KIRYACHEK, Andrey Yakovlevich; BER,
Ya.M., inzh., retsenzent; GRACHEV, A I., inzh., nauchn.red.;
VAYTS, V.M., red.

[Automated control of the electric drives of continuous-
line systems] Avtomatizirovannoe upravlenie elektroprivodami
potekhnico-transportnykh sistem. Moskva, Energiia, 1965. 207 p.
(MIRA 18:5)

BERA, G.

Scrap iron for steel mills. Constr Buc 16 no.737:4
22 F'64.

MATEI, Gh., ing.; SANDU, S.; BERA, G.; CEBOTARENCO, M. POPESCU, M., ing.;
TOMESCU, Petre

Reviewing the achievements. Constr Buc 16 no.742:1
28 March 1964.

1. Postul de corespondenti voluntari de la craiova (for Matei).
2. Subredactia voluntara de la Ploiesti (for Cebotarencu).
3. Fabrica de geamuri-Scaeni (for Tomescu).

BARTHMES, Helmut, ing.(Vulcan); SASU, Nicolae (Vulcan); EERA, G.A. (Arad)
MAISNER, Viorica (Ibiv); SIRIOPOL, T., tehnician (Galati)

At some construction sites on the threshold of winter.
Constr Buc 15 no.724:1 23 N '63.

1. Seful santierului 10-Vulcan al T.R.C.L.H. (for Barthmes).
2. Adjunct al sefului de santier 10-Vulcan al T.R.C.L.H.
(for Sasu).

BERA, L.

"Production cost of maroquin-leather goods; methodology for the control of its evolution and means for its reduction."

p. 76 (Industria Usocara) Vol. 4, no. 2, Feb. 1957
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

HERA, L.

Drying vegetable-tanned pigskins for leather goods on glass plates. p.107.

INDUSTRIA USOARA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si Departmentul Industrii Usoare din Ministerului Industrii si Comerțului) Bucuresti, Romania. Vol. 6, no. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI) ID, Vol. 8, no. 7, July 1959

Uncl.

BERACKO, PAVOL

CH *Vinyl chloride*, 161. *Handbook of Chemistry and Physics*, 40th ed., 1960. A soln. of $\text{CH}_2=\text{CHCl}$ (1:1) was converted at 180-7° over C impregnated with aq. soln. of $\text{Hg}(\text{PO}_3)_2$ or $\text{Hg}(\text{AsO}_3)_2$. Conversion of $\text{C}_2\text{H}_3\text{Cl}$ to vinyl chloride was 99.7% and the lifetime of the catalyst was 175 hrs., compared with HgCl_2 which caused 81-8% conversion and lasted 90 hrs. J. Urbanek

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BERNARD, G. A.

Bending of "gazha"-portland cement concrete with the reinforcement. Trudy GPI [Gruz.] no. 4:27-34 '63. (MIRA 17:5)

KURASHVILI, P.A.; KAPTOZIYA, TS.I.; BERADZE, G.I.; MUKERIYA, N.G.

Age-related characteristics of the indices of protein-lipoid
metabolism in white rats. Soob. AN Gruz. SSR 36 no.1:85-91
0 1964. (MIFA 18:3)

1. Institut pediatrii Ministerstva zdravookhraneniya Gruzinskoy
SSR, Tbilisi. Submitted April 16, 1964.

MARUASHVILI, T.; CAMENOTA, HIDEKI, I.; BORISOV, M.

Use of electric models in solving nonlinear equations. Trudy
Vysch. Shkoly. AN Gruz. SSR 1977-1982 Vol. (MIRA 17:6)

SARADZ, I.; CHECHNIYA, Z. ; KUCHUMASHVILI, M.; and MEALOBLESHVILI, O.

"The Results of the Intracutaneous Allergic Test for Vert in Eye Diseases"

Voprosy toksoplazmoza, report theses of a conference on toxoplasmosis, Moscow, 3-5 April 1961, publ. by Inst Epidemiology and Microbiology in. L. S. Smolega, Acad. Med. Sci USSR, Moscow, 1961, 6 pp.

BERADZE, N.; DZHINDZHIKHADZE, G.

Immediate and late results of the use of a suture on a penetrating
wound of the eye. Trudy Tbl. GIDUV 6:247-254 '62. (MIRA 16:2)
(EYE-WOUNDS AND INJURIES) (SUTURES)

BERADZE, N.I.

Cyclodialysis

Vest. oft., 31, no. 2, 1952

SIKHARULIDZE, I.A., zasl. deyatel' nauki, prof., otv. red.;
 BERADZE, N.I., dots., otv. red.; ARKHANGEL'SKIY, V.N.,
 prof., red.; ABULADZE, V.A., red.; ANTELAVA, D.N., kand.
 med. nauk, red.; BOGOSLOVSKIY, A.I., doktor biol. nauk,
 red.; BUNIN, A.Ya., kand. med. nauk, red.; VILENKINA, A.,
 doktor med. nauk, red.; VISHNEVSKIY, N.A., prof., red.;
 ZARUBIN, G.S., nauchn. sotr., red.; ITSIKSON, L.Ya., kand.
 med. nauk, red.; KRASNOV, M.L., zasl. deyatel' nauki, prof.,
 red.; MACHARASHVILI, P.D., zasl. vrach Gruz. SSR, red.;
 PUCHKOVSKAYA, N.A., prof., red.; RABKIN, Ye.B., prof., red.;
 RSHZHECHITSKAYA, O.V., kand. med. nauk, red.; ROSLAVTSEV,
 A.V., st. nauchn. sotr., red.; TARTAKOVSKAYA, A.I., kand.
 med. nauk, red.; FRADKIN, M.Ya., prof., red.; KHAYUTIN, S.M.,
 prof., red.; CHERNYAKOVSKIY, G.Ya., kand. med. nauk, red.;
 CHKONIYA, E.A., kand. med. nauk, red.; SFATILOVA, T.A.,
 doktor med. nauk, red.; YAKCVLEV, A.A., nauchn. sotr., red.

[Materials of the Second All-Union Conference of Ophthal-
 mologists] Materialy Vsesoiuznoi konferentsii oftal'molo-
 gov. Tbilisi, Respublikanskoe nauchn. ob-vo oftal'mologov
 Gruz.SSR, 1961. 498 p. (MIRA 18:1)

1. Vsesoyuznaya konferentsiya oftal'mologov, 2d, Tiflis, 1961.
2. Chlen-korrespondent AMN SSSR (for Arkhangel'skiy).

BERADZE, N.I., dotsent, CHEKONIYA, E.A., dotsent, NACHELISHVILI, M.Ye.

Toxoplasmosis of the eye. Sbor. nauch. trud. SOGMI no.14:
190-193 '63. (MIRA 14.9)

1. Kafedra glaznykh bolezney Tbilisskogo gosudarstvennogo
instituta usovershenstvovaniya vrachev.

BERADZE, Nikolay Ivanovich

[Problem of surgical treatment of penetrating wounds of the eye]
K voprosu khirurgicheskoi obrabotki pronikaushchikh ranenii glaza.
Tbilisi, Sabchota Sakartvelo, 1959. 15 p. (MIRA 13:8)
(EYE--WOUNDS AND INJURIES)

BERAHA, Raka, ins.

Seminar on ultrashort-wave techniques for the telegraph and
telephone mechanics and technicians. PTT Zajed 4 no.3:48
My-Js '62.

LEKVEISHVILI, Irakli Spiridonovich; BERAIA, Yason Kalistratovich

[Subtropical crops] [Subtropicheskie kul'tury. Tbilisi,
Ganatileba] 1965. 390 p. [In Georgian] (MIRA 18:8)

BERAIYA, Ya. K., Cand Agr Sci -- (diss) "Basic problems of crop beds under conditions of humid sub-tropics (Kolkhidskaya depression)." Tbilisi, Georgian Agricultural Inst Press, 1960. 24 pp; (Ministry of Agriculture Georgian SSR, Georgian Order of Labor Red Banner Agricultural Inst); 150 copies; price not given; (XL, 17-60, 162)

БРАК, И.

mel (3)

Metallurgical Abst.
Vol. 21 Apr. 1954
Properties of Alloys

Copper-Titanium System. W. Trzaskowski, G. Berak, and J. Kozłowski (Roczn. Chem., 1953, 27, 426-437). (In Polish). The existence of five intermetallic compounds (Cu_2Ti , Cu_3Ti , Cu_5Ti , CuTi , and CuTi_2) was established by metallographic, thermal, and X-ray analysis of Cu-Ti alloys in the range 0-75 at.-% Ti. Cu_2Ti , Cu_3Ti , and CuTi melt congruently at 903°, 932°, and 1014° C., resp. Cu_5Ti and CuTi_2 are formed by peritectic reactions at 892° and 935° C. Cu_5Ti decomposes at 872° C. into Cu_2Ti + CuTi ; CuTi_2 at 843° C. into CuTi + Cu_2Ti . The solubility of Ti in Cu is 6.8 at.-% at 1870° C., 2.4 at.-% at 800° C., and 1.3 at.-% at 300° C. Three eutectics exist at 24 at.-% Ti (895°), 29 at.-% Ti (880°), and 70 at.-% Ti (1009° C.). The details of the phase diagram are discussed and compared with the results of other investigators (e.g. Karisoon, J. Inst. Metals, 1931, 79, 391; M.A., 18, 764).—S. K. L.

P.T.A.

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Beinik J. The System Iron-Phosphorus-Cobalt
"Система железо-фосфор-кобальт" Изв. АН УССР, No. 1, 1951, pp. 6, 13, 20
figs., 1 tab.

The ternary system Iron-Phosphorus-Cobalt has been totally examined in the region $Fe-Fe_3P-Co_3P$ by means of thermal analysis, microscopic analysis and X-rays. It has been proved that the section $Fe-P-Co-P$ is pseudo binary. It has a peritectic at $15^\circ Co$ as well as a very narrow heterogeneous area in the solid state. In the ternary system the existence of an equilibrium line has been established, directed from Fe_3P to the side-system Cobalt-Phosphorus.

up to $67^\circ Co$. The solid solutions $(Fe, Co)_3P$ are stable at room temperature from 0 to $20^\circ Co$, but from 20 to $67^\circ Co$ decompose at temperature lower than $800^\circ C$. It has been demonstrated that the chemical compound Co_3P is non-existent. The difference in the affinity of Iron and Cobalt to Phosphorus is very small.

BERAK, J.

Journal of Applied Chemistry
April 1954
Industrial Inorganic Chemistry

Copper-titanium system. W. Trzebiatowski, J. Berak, and T. Rojnowski (*Roczn. Chem.*, 1953, 27, 426-437). A phase diagram is constructed on the basis of thermal, metallographical, and X-ray analysis of alloys in the range 0 to 75 at.-% Ti. The results obtained by all three methods are concordant and prove the existence of five intermetallic compounds and of three eutectic mixtures. Discovery of a new compound Cu_3Ti , and the fact that Cu_3Ti crystallizes congruently removes the main difficulties other investigators (N. Karlsson, *J. Inst. Metals*, 1951, 79, 391; A. Jonkainen *et al.*, *J. Metals*, 1953, 4, 786) had in reconciling the results of different methods of analysis. S. K. LACHOWICZ.

BERAK, J.

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Barium oxide-titanium oxide system. W. Trzebiatowski, M. Dvys, and J. Berak (*Rocen. Chem.*, 1954, 28, 21-28). Study of the BaO-TiO₂ system in the range 33-100 mol.-% TiO₂ by method of thermal, microscopical, and X-ray analysis reveals existence of four compounds 2BaO.TiO₂, BaO.TiO₂, BaO.2TiO₂, and BaO.4TiO₂, melting at 1820°, 1810°, 1315°, and 1465° respectively. There are four eutectic mixtures of the following composition and m.p.: 44 mol.-% TiO₂-1585°, 65% TiO₂-1310°, 68% TiO₂-1305°, and 82% TiO₂-1435°. The results of this work differ in many respects from the results of Stratton (*J. chem. Phys.*, 1951, 19, 33) obtained by a micro-method.

S. K. Lachowicz.
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BERAK, J.

POL.

The platinum-rhenium system. W. Trumbull Berak and J. Berak (Ind. Acad. Sci., 57, 1954, 2, 37-40). The alloys used were prepared by powder methods and sintered at 1800° in H₂ for 30 hr. The melting points of four alloys, containing up to 50% Re, are given. X-ray analysis was carried out on the powdered alloys, and their hardness measured by the Vickers method. The phase diagram of the system shows that Pt and Re form solid solutions over wide ranges of composition. The lattice constants and hardness are given as functions of the Re content; irregular changes are found in the lattice constant of the Re phase. The hardness of Pt rises markedly with the Re content, forming a flat maximum at the 50% Re: 50% Pt point.

D. J. C. YATES.

BERAK, J.

Platinum-rhenium system. W. Tencatowski and J. Berak (Inst. Technol., Warsaw, Poland). *Pol. sci. paper, ser. A*, Classe III, 2, 37-40 (1964) (in English). --The alloys were prepd. by powder methods with Pt produced from pure H_2PtCl_6 and pure Re metal reduced with H_2 at 1200°. Alloys were de'd. for samples con'tg. 10, 20, 30, and 50% Re. The heterogeneous region of the phase diagram extends approx. from 40 to 90% Re. The m.p. of Pt rises with the Re content, but at 2150° or 30° a peritectic reaction occurs. X-ray analysis was made by powder methods. The c axis of the hexagonal Re cell diminishes with increasing Pt content, but the a axis expands.

H. Rosenwasser

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Jozef Borsak, JOZEF

The system BaO-TiO_2 , Włodzisław Trzebiatowski, Mirosława Dęta, and Józef Borsak (Inst. Technol. Wrocł., Poland); *Rozprawy Chem.* 26, 111 (1984) (English summary).—The system BaO-TiO_2 was analyzed by micro-analytic, thermal, and x-ray methods within the range of 33–100 mol. % TiO_2 . The m.p.s. of 4 purified compds. were: BaO-TiO_2 , 1120°; BaO-TiO_2 , 1640°; BaO-2TiO_2 , 1315°; BaO-4TiO_2 , 1440°. These compds. are eutectic mixts. at the following compns. and temps.: 14 mol. % TiO_2 at 1583°; 65 mol. % TiO_2 at 1310°; 68 mol. % TiO_2 at 1305°; and 82 mol. % TiO_2 at 1485°. The high-temp. transformation of BaTiO_3 is due to transition of the perovskite lattice into the hexagonal type, first noted by Hurlbut and Evans (cf. *C.A.* 43, 3291j). The results of this work are compared with those of Saito (cf. *C.A.* 43, 4414g). S. Nowinska

(2)

BETAK, J. ; ELLMAN, R.

J. BETAK, "The mechanism of Fischer-Tropsch synthesis of hydrocarbons."
No. 3, March 1955, pp. 122-124, Chemical News (Poland).

BERAK J.

000001100207:00.007.5

The Influence of Physico-Chemical Properties of Carriers on the Activity of Iron Catalysts for the Synthesis of Hydrocarbons by the Fischer-Tropsch Method.

„Wplyw własności fizykochemicznych nośników na aktywność katalizatorów żelaznych do syntezy węglowodorów metodą Fischera-Tropscha".
Przemysł Chemiczny, No. 2, 1964, pp. 433-438, 2 fig., 12 tabs.

A demonstration of the influence of physico-chemical properties of carriers on the activity of iron catalysts. The experiments conducted lead to the conclusion that the degree of dispersion of carrier (expressed as a content of colloidal substance and as the gasifying ability of the carrier) is of decisive influence on the activity of the catalyst. A study was made of the change with time of the activity of catalysts reduced with hydrogen and with water gas. The characteristics are given of the curves of relation between the activity of the catalyst and the physico-chemical properties of the carrier for the two methods of reduction.

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Enak, J.

Distr: 4E2c/4E2c(j)

✓ The influence of physicochemical properties of the supports on the activity of iron catalysts for hydrogenation/synthesis according to Fischer-Tropsch. J. Benik (Politech Inst., Silesia, Poland). Przemysl. Chem. 34, 412-6 (1955).

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1, The catalyst supports investigated are referred to by trade names and analyses presented for SiO₂/Fe₂O₃/Al₂O₃/CaO/MgO and loss upon heating. By measuring survival properties of these catalyst supports (presented in 12 tables) it was found that the amt. of colloidal material therein and the peptizing power of such supports play a major role with respect to the activity of this catalyst. The activity of the catalyst will change also depending upon its manner of prepn., i.e. if it was reduced with H or with producer gas. The differences in the activity due to these 2 methods of prepn. can be traced to changes occurring in the support, i.e. unsupported Fe would show the same (low) activity by either method of prepn. 10 references. Werner Jacobson

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The manufacture of defluorinated calcium pyrophosphates in the light of new study of the system $\text{CaO-P}_2\text{O}_5\text{-SiO}_2$. J. Berak (Polytech. Wroclaw, Poland). *Przemysl Chm.* 33, 120-21 (1955).—The present state of knowledge of the system is reviewed and discussed. The position of the sintered and melted pyrophosphates and the "Thomas" phosphate meal on the ternary phase diagram $\text{CaO-SiO}_2\text{-3-CaO-P}_2\text{O}_5$ was detd. Silicocarnotite, $5\text{CaO.P}_2\text{O}_5\text{-SiO}_2$, is the only compd. responsible for good sily. of the thermophosphates. A polythermal cross section is constructed on the ternary diagram $\text{CaO-P}_2\text{O}_5\text{-SiO}_2$ from the point 35% P_2O_5 , 65% CaO , to the SiO_2 point. The area of silicocarnotite formation is detd. on this cross section. From considerations of the position of this area, it is proposed to sinter the phosphate with not more than 6-10% of sand at 1400° , in the presence of water vapor. The product is to be cooled slowly. The silicocarnotite is formed during cooling at about 1300° . A fine grinding of the constituent phosphate and sand, and a thorough mixing is advised, because the reaction proceeds in the solid state. Starting from phosphate of 34% P_2O_5 and adding 7% SiO_2 , a product of 33% P_2O_5 can be achieved by the sintering method. M. G.

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y.

BERAK, JOZEF

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

Author : I - Jadwiga Wojciechowska, Jozef Berak, Wlodzimierz
Trzedziatowski. II - Jozef Berak, Jadwiga Wojciechowska.

Inst : -

Title : Study of $\text{CaO} - \text{P}_2\text{O}_5 - \text{SiO}_2$ System. I. Particular System
 $3\text{CaO} \cdot \text{P}_2\text{O}_5 - \text{CaO} \cdot \text{SiO}_2 - \text{SiO}_2$. II. Particular System $3\text{CaO} \cdot$
 $\text{P}_2\text{O}_5 - 2\text{CaO} \cdot \text{SiO}_2 - \text{CaO}$.

Orig Pub : Roczn. chem., 1956, 30, No 3, 743-756, 757-771

Abstract : I. The systems $3\text{CaO} \cdot \text{P}_2\text{O}_5 - \text{SiO}_2$ (I), $3\text{CaO} \cdot \text{P}_2\text{O}_5 - \text{CaO} \cdot$
 SiO_2 (II) and $3\text{CaO} \cdot \text{P}_2\text{O}_5 - \text{CaO} \cdot \text{SiO}_2 - \text{SiO}_2$ (III) were stu-
died by the thermal, microscopic and roentgenographic me-
thods. The system I is a pseudobinary one. The solubili-
ty of SiO_2 in the phosphate at the eutectic temperature "
(t. eut.) of 1535° is about 2.5%, i.e., a half of what Tro-
mel and others have given (Tromel G. and others., Z. anor-
gan.

Card 1/4

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transition

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

und allgem. Chem., 1948, 256, 253). SiO_2 does not influence the transformation temperature (t. tr.) of $\text{AB-3CaO.P}_2\text{O}_5$. The composition of the eutectic is: 7.5% of SiO_2 , 92.5% of $\text{3CaO.P}_2\text{O}_5$ at 1535°, which agrees well enough with the results of the above mentioned authors. The immiscibility region in the liquid phase is in the range of from 14 to 99% of SiO_2 . The system II is a pseudobinary one, which confirms the assumption of Barrett and McCaughey (Barrett R.I., McCaughey W.J., Amer. Mineralogist, 1942, 27, 680). 65% of CaO.SiO_2 , 35% of $\text{3CaO.P}_2\text{O}_5$ and 1420° answer to the eutectic point. The solubility at t equ. is about 3% of calcium metasilicate in phosphate and about 4% of phosphate in metasilicate. An addition of CaO.SiO_2 lowers the transformation temperature of $\text{AB-3CaO.P}_2\text{O}_5$, but does not influence the transformation temperature of CaO. SiO_2 . 17% of P_2O_5 , 37% of SiO_2 ,

Card 2/4

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

46% of CaO and 1380° (1350° according to Barrett) correspond to the eutectic point in the system III. The shape of the eutectic curves is similar to that observed by Barrett. The immiscibility region in the liquid phase was observed in another range than by Barrett. Bibliography 13 titles.

II. The systems $3\text{CaO} \cdot \text{P}_2\text{O}_5 - 2\text{CaO} \cdot \text{SiO}_2$ (IV) and $3\text{CaO} \cdot \text{P}_2\text{O}_5 - 2\text{CaO} \cdot \text{SiO}_2 - \text{CaO} \cdot \text{SiO}_2$ (V) were studied by the thermal, microscopic and roentgenographic methods. The Bredig's assumption (Bredig M., Phys. Chem., 1942, 46, 747; J. Amer. Ceram. Soc., 1950, 33, 188) was confirmed for the system IV. This is a pseudobinary and peritectic system characterized by large regions of solid solutions, chiefly of $-2\text{CaO} \cdot \text{SiO}_2$. At 1300°, a new phase -silicocarnotite - is forming in the result of a reaction, which takes place

Card 3/4

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

in the solid state accompanied by a volume increase; silicocarnotite produces solid solutions also. The temperatures of polymorphous transformations of $2\text{CaO} \cdot \text{SiO}_2$ and $3\text{CaO} \cdot \text{P}_2\text{O}_5$ are lowered. Two four phase transformations in presence of the liquid phase are observed in the system V: a peritectic one at 1440° and an eutectic one at 1415° . 16% of P_2O_5 , 31% of SiO_2 and 53% of CaO correspond to a ternary eutectic. One four phase transformation occurs in the solid state at about 1300° . The obtained results differ from that given by Barrett (Barrett R.H., McCaughey W.I., Amer. Mineralogist, 1942, 27, 680); the proposed phase diagram is considerably simpler than that of Barrett.

Card 4/4

POLAND / Physical Chemistry. Thermodynamics. Thermo- B
chemistry. Equilibriums. Physico-chemical
Analysis. Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70038.

Author : Berak, J.

Inst : ~~Not given~~

Title : A System $MgO-P_2O_5$.

Orig Pub: Roczn. chem. 1958, 32, No 1, 17 - 22.

Abstract: A phase diagram of the system $MgO-P_2O_5$ was plotted in the range from 0-78 weight % of P_2O_5 based on the data supplied by thermal, microstructural and X-ray-phase analysis. Three compounds melting congruently were found: $3MgO.P_2O_5$; $2MgO.P_2O_5$ and $MgO.P_2O_5$ at 1357,

Card 1/2

POLAND / Physical Chemistry. Thermodynamics. Thermo- B
chemistry. Equilibriums. Physico-chemical
Analysis. Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70038.

Abstract: 1382 and 1165° C respectively. $3\text{MgO} \cdot \text{P}_2\text{O}_5$
forms solid solutions with P_2O_5 of low
concentrations, whereby the temperature of
the polymorphic transformation is decreased
from 1055 to 940°C.

Card 2/2

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BERAK, J.

COUNTRY : Poland
CATEGORY :

M-31

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AUTHOR : Taniewski, M.; Berak, J.
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TITLE : Development Trends of the USSR Industry of
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ABSTRACT : Considerations concerning development of
synthetic rubber industry in Poland, taking into account
the USSR experience. -- V. Lenetov.

CARD: 1/1

Distr:
4E2o/4E3d

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the system $MgO-P_2O_5-SiO_2$. Jadwiga Wojciechowska
and Józef Berak (Politech. Wrocław, Poland). *Rozprawy
Chem.* 33, 21-31 (1959) (English summary). — Investigation
of the partial system $MgO-3MgO \cdot P_2O_5$ (I)- SiO_2 gave the
following results: The section I- SiO_2 forms a eutectic mixt.
(3.5% SiO_2 , 96.5% I, 1830°) and its miscibility gap in the
liquid state extends from 24 to 99% SiO_2 . The sections I-
 $MgO \cdot SiO_2$ (II) and I- $2MgO \cdot SiO_2$ (III) have eutectic points
at 30% II, 70% I, 1290°, and 30% III, 70% I, 1310°, resp.
All 3 sections are quasi-binary. No noticeable soly. of
 SiO_2 , II, and III in the phosphate phase was observed. The
polymorphic transformation α/β -I occurs at 1060°. The
ternary system $MgO-I-SiO_2$ consists of 3 partial systems:
(a) I-II- SiO_2 , (b) I-III-II, and (c) I-MgO-III. They form
the following eutectic mixts.: (a) 18% SiO_2 , 32% P₂O₅
(I/II), 43% MgO at 1280°; (b) 18% SiO_2 , 33% IV, 47%
MgO at 1287°; and (c) 11% SiO_2 , 59% IV, 51% MgO at
1377°. System a is characterized by an extensive misci-
bility gap in the liquid state. The samples of mixtures
ranging over 10% III, particularly within the range of binary
and ternary eutectics show high ability to form glass.
Photomicrographs are presented. A. Krcmar.

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